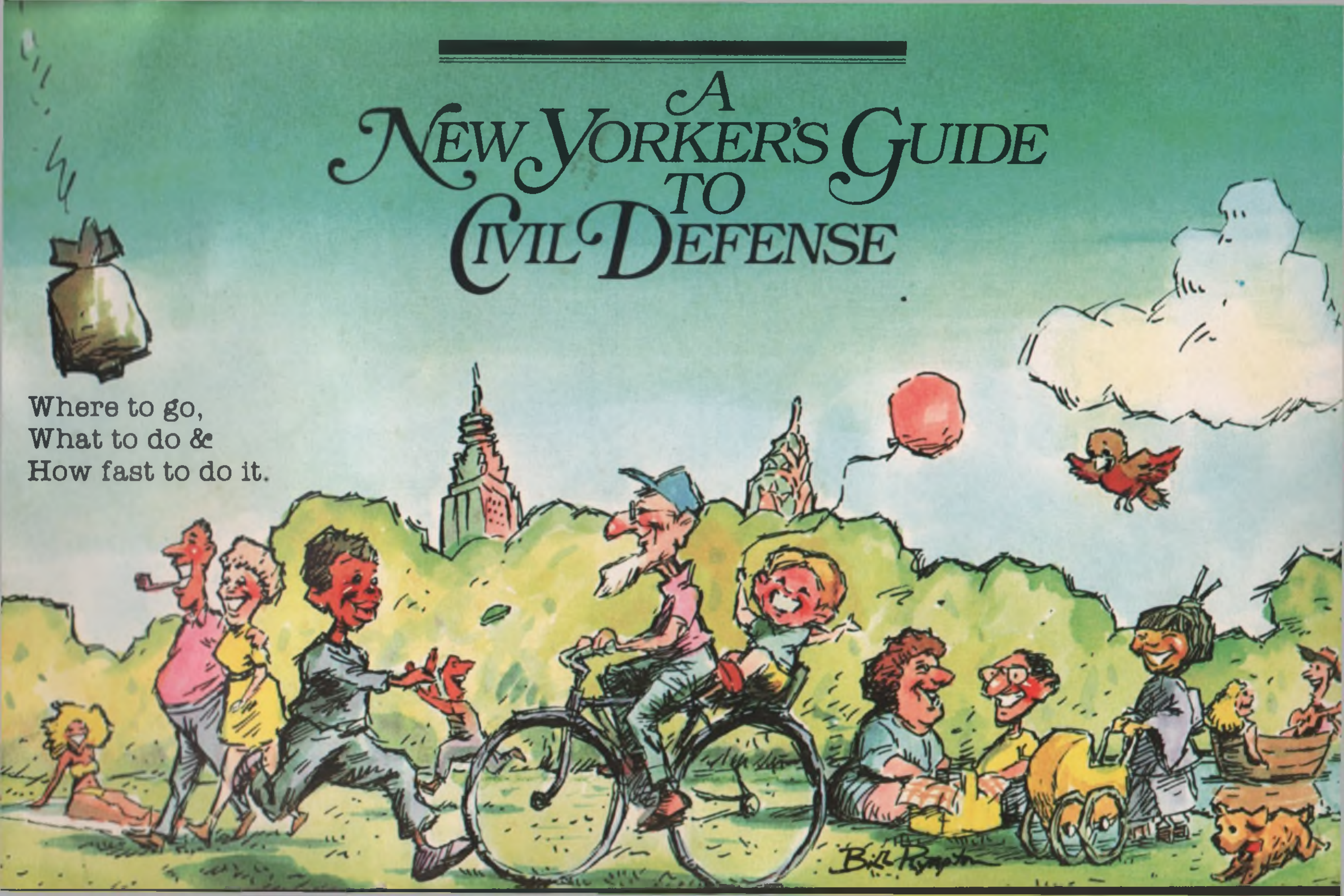
A NEW YORKER'S GUIDE TO CIVIL DEFENSE

Where to go,
What to do &
How fast to do it.



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Physicians for Social Responsibility/New York City

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Dear New Yorkers,

In June 1982 the New York City Council voted to refuse all Federal funds for civil defense preparations for nuclear war. This decision was taken after extensive testimony by medical and governmental experts. The information presented was not only terrifying, but revealed our vulnerability to the effects of nuclear weapons.

This booklet is designed by Physicians for Social Responsibility/New York City and the office of Council member Ruth Messinger to make that testimony available to everyone. It is meant to educate and activate. Educated voters, concerned and informed citizens can make a difference. The New York City Council refusing funds for nuclear war preparation is only one important example of what we can do together.

Sincerely,

Jonathan Lorch

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President, PSR/NYC

Ruth W. Messinger
Council Member,
New York City Council

What's everyone so worried about?

I don't understand, on June 12th a million people were walking together through the streets of New York saying, ‘Stop the Arms Race!’’ What's everyone so worried about?

They're worried about the increasing possibility of nuclear war because at least six nations now have nuclear weapons. And 90% of these are held by either the Soviet Union or the United States—50 thousand in all. It means that if we dropped one Hiroshima size bomb every minute, 60 minutes an hour, 24 hours a day, every day, the explosions would not stop for two years. And missiles carrying nuclear bombs can cross the Atlantic in less than thirty minutes.

They're also worried because control over nuclear weapons depends on erratic international politics, the stability of world leaders, and the people and computers at Command Headquarters. Computer error has already brought our nuclear forces to a state of alert many times. So, knowing that we are thirty minutes, or less, from extinction by nuclear war—a war which could be triggered by declaration, madness, or accident—makes a lot of people nervous.

But I live in Queens, and if we are attacked I plan to take the

family to the Civil Defense shelter at the school. It's way down in the subbasement. It's really safe.

If a single twenty-megaton bomb were exploded over the Empire State Building, and we were hiding in our Civil Defense shelter, we would not survive the two main effects of the bomb—heat and blast.

As the bomb explodes it creates a fire-ball six miles across with light and heat as intense as the center of the sun. At ground-zero we are vaporized. Not burned, not charred, but vaporized. Farther out, people and objects burst into flames and the blazing heat sets fire to everything combustible, sheet metal on buses ignites, tires liquefy, tanks explode and human flesh melts. As far away as four miles, the light from the flash passing through windows ignites rugs and furniture. Twelve miles away the flash causes blindness, charred flesh

and third-degree burns. Even at a distance of 45 miles, a reflex glance at the fire-ball might cause blindness.

"The center of the sun!" How hot is that?

The bomb produces heat in excess of 10 million degrees. You can't even escape by jumping into the water because those temperatures would cause the rivers to boil. All this takes place in the first three seconds after the explosion.

After three seconds, the second effect of the bomb is felt—blast. The air pressure suddenly increases 10 million times, acting as a million-ton fist crashing down. The pressure flattens reinforced concrete buildings and crushes brick homes for a twelve-mile radius. The winds produced by this pressure form a shockwave. Cars, glass shards, metal and human bodies are blown through the air at up to 300 mph. As far as Kennedy airport, debris and people are propelled at speeds up to 100 mph.

Why won't I survive? . . . I'm in a shelter twelve miles away.

Because just minutes after the explosion the combined effects of heat and blast produce a firestorm. A firestorm is a raging bonfire using the city as fuel. Gas-main breaks, exploding fuel tanks, collapsing buildings and flaming rubble add to the inferno. In a firestorm the temperature at street level melts steel, glass and skin. The fire consumes all the oxygen. Families hiding in shelters up to 25 miles away suffocate and/or roast to death. They do not survive.

It has now been 12 hours since the bomb exploded. 88% of our population is dead

But I heard that staying indoors with the windows closed can protect us from fallout.

or severely injured. And we have not yet mentioned radioactive fallout.

What exactly is fallout?

Radioactive fallout is a mixture of earth, rubble and radioactive bomb material that has been sucked up and vaporized in the mushroom cloud. The radioactive particles fall with the rains and, like the volcanic ash from Mt. St. Helen, are blown thousands of miles. The air and rain over New York City would contain lethal quantities of this invisible radiation.

But I heard that staying indoors with the windows closed can protect us from fallout.

Where the fallout lands depends upon the direction of the wind, the movement of the rain clouds and the intensity, location and height of the detonation. Our single bomb over the Empire State Building could spread deadly radiation as far north as Boston. As the fallout blankets neighborhood after neighborhood, it contaminates water supplies, air, food, clothes, crops, livestock and people. And the radioactive particles are small enough to seep through leaky windows and porous walls; so staying inside offers little protection.

I'm confused. I just heard that some radiation is good for us.

The effects of radiation differ with the type, the length of time and the intensity of the exposure. Exposure to radioactive fallout may be especially dangerous for older people, children, the sick, pregnant, and unborn.

Radiation sickness may begin hours after the explosion and it lasts for weeks; its symptoms are loss of hair, nausea, vomiting and diarrhea. Later, as our blood cells are affected, we lose our ability to fight infections, we become weak and anemic and begin bleeding from every orifice—even from under our skin.

But isn't there medicine for that?

The treatment would require

hospital care, and if only two or three radiation victims came to a major hospital today, the medication, transfusions, plasma, specialized care and sophisticated therapy required would strain the hospital's resources. One bomb over New York City would expose millions. This number of radiation victims would be impossible to treat medically. And realistically hospitals would be destroyed and doctors and medical teams would be among the dead.

The long-term effects of radiation may be so severe that, even if we escape radiation sickness, we may suffer from the after-effects of fallout years, even decades, later. These long-term effects of radiation include: leukemia, breast cancer, thyroid cancer, lung cancer, cancer of the large intestine and changes in our genes. Once affected, we can never rebuild our genetic structure.

I can't believe that I live minutes away from a nuclear war, death by vaporization, suffocation, being crushed, blown through the streets at 300 mph, incinerated in a firestorm or incapacitated from the effects of fallout . . . and that no one is doing anything about it! Look, how do we protect ourselves?

The Federal Emergency Management Agency (FEMA) has a civil defense plan called "crisis relocation," which is simply civilian evacuation. There are certain designated "risk" areas and other so-called "safe" areas. In the event of nuclear war, 11 million people are supposed to evacuate the Metropolitan Area (high-risk area) in a little over three days. Moving by bus, train, car, plane,

Once affected, we can never

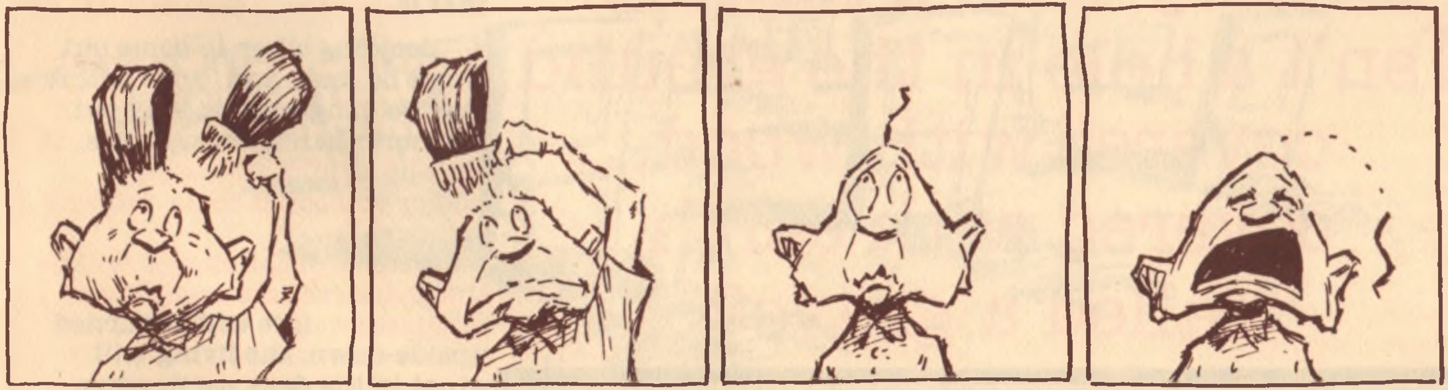
and boat, we will be relocated to host ("safe") areas.

Once there, we must build our own shelters. T.K. Jones, Undersecretary of Defense for Strategic and Nuclear Forces, advised the following: "Dig a hole, cover it with a couple of doors, and then throw three feet of dirt on top. It's the dirt that does it."

rebuild our genetic make-up.

Hey wait a minute! Isn't a hole in the ground, covered with wood, covered with earth, called a grave? I mean, are we digging our own graves, jumping in, and saving them the trouble? And won't the enemy be suspicious?

Sure. If they notice we are evacuating our cities and crawling into holes in the ground, they may conclude we are preparing for nuclear war and launch their weapons first. Or, having a week's notice, they could simply retarget their missiles and follow us. But let's say they wait for 11 million New Yorkers to leave town and then



they attack. What then?

Well, the ones who made it into good shelters, far enough away, will be the ones to come back and start again. Right?

Not so fast. Although we are miles away in our holes or shelters, there will be problems. For instance, who will risk climbing out of the shelter first? One study group suggested that those over forty crawl out first because they probably won't live long enough to develop the cancers and leukemias that follow radiation exposure. That means the over forty group bears the responsibility for carrying garbage and human waste from the shelters, removing and burying corpses, scavenging for food, carrying water and exploring the outside world for signs of life and help.

Hey wait a minute!
Isn't a hole in the ground,
covered with wood,
covered with earth,
called a grave?

Living in a dark hole with no air would make me crazy. As soon as I got the O.K., I'd be the first one out—as soon as it was safe, that is.

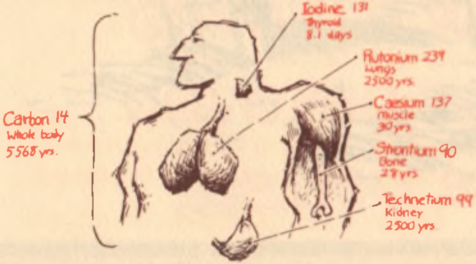
Deciding when to come out won't be easy. And, once out, it may be dangerous to stay out for more than a few minutes. It may be as long as one year before you could come out for a full day.

Outside of the shelter will be the shattered remains of our civilization. Life will be turned upside-down: the living will squat in the dark earth while decaying corpses sprawl in the sun. Anyone able to offer help from the "outside" would do so at great risk of personal contamination. In any case, the disruption of communication and electrical systems due to the bomb's electromagnetic pulse would make outside help or contact all but impossible.

Those waiting inside the shelter begin to experience acute radiation sickness. Young children and the elderly will quickly die from dehydration caused by diarrhea and lack of water. Shelters will have poor toilets, if any, and air vents must remain sealed to keep out the lethal radiation. The temperature inside the shelter will soon rise to intolerable levels just from the accumulation of body heat. The stench will be unbearable and yet, opening the door—even to get rid of the dead—would subject the living to serious radiation threats. Life's normal traumas would continue, too. Birth, colds, fever, infection, broken bones, strokes, heart attacks and death. We manage to cope with these events in the course of our daily lives—but what about in the close, hot confines of a small damp hole, in total darkness day after day after day?

How long does this go on?

Some of the contamination lasts thousands of years. Below is a drawing showing how the body is affected by radioactively contaminated food and water. The arrow shows where the contaminant has its destructive effect, and the number shows how long the effect lasts, its half-life. A half-life is the amount of time it takes for something to be reduced by half. So, if you begin with one pound of carbon with a half-life of 5 thousand years, in 5 thousand years you will have half a pound. Five thousand years after that you would have a quarter of a pound, etc.



Even after the corpses and the debris are buried, radioactive contamination would make New York unsafe for at least twenty years.

In addition, there is the problem of sufficient quantities of suntan lotion and dark glasses.

Sunglasses! Don't joke!

I'm not joking. Nuclear weapons have a profound effect on our atmosphere. The earth is blanketed by a delicate layer of charged oxygen, called the ozone layer. It functions to screen out the sun's ultraviolet rays. It's estimated that after a nuclear war much of the ozone layer will be destroyed. That means that being outdoors during the day would subject us to severe sunburn and blindness. The solution for humans is simple: suntan lotion and dark glasses. But animals, including birds and insects, will become blind, and disoriented and will die. This could mean the collapse of the entire ecosystem.

But Hiroshima . . .

True, Hiroshima is now a rebuilt city, but there's no comparison. Today's twenty-megaton bombs are 1500 times more powerful than the Hiroshima bomb! Also, the one Hiroshima bomb was exploded high in the air with a minimum of fallout produced. At present, it's estimated that up to fifty atomic bombs are targeted for the New York area alone.

The result will be unimaginable suffering. FEMA is prepared. They have stockpiled, in upstate New York, 70

New York unsafe for at least twenty years.

thousand pounds of morphine for the suffering survivors. The morphine may temporarily quell our pain or end it permanently by euthanasia (mercy killing).

Well, if there's no real Civil Defense, isn't there at least a military defense against nuclear weapons?

No. There's no defense against even a single nuclear weapon. There's no way to stop a missile once it has been launched. There's no turning back from a strike and counter-strike. There is no retreat once the first move has been made. Remember, it takes only thirty minutes for a missile with nuclear weapons on board to travel 6 thousand miles, and from a submarine close to shore it takes only six minutes. After all our silos have been emptied on them, and after all their silos have been emptied on us, and after all the atomic weapons circulating on bombers have been dropped and all the rockets launched, there still remain submarines carrying nearly 200 nuclear weapons each! One of these submarines alone carries enough nuclear weapons to destroy an entire nation!

Wait! Couldn't we store the weapons, update them technologically, and just not use them?

It's not that simple. When we have them, we must protect them, deploy them, test them, computerize them and work out realistic scenarios for their use. This in itself is dangerous.

For instance on November 9, 1979, a computer was fed a practice war game tape. Both the North American Air Defense Command and the U.S. Air Force mistook the "game" to be real and prepared to launch our nuclear weapons just minutes before the mistake was discovered. We have even gone as far as a red alert (launch keys inserted and missiles ready to fire), based on faulty and/or inaccurate data processing.

Add to this the spread of nuclear weapons to France, England, China, Israel, and to other often unstable countries, such as Libya, Turkey, Indonesia, Bulgaria, Brazil, Chile and South Africa, and the risk of accidental or intentional nuclear war multiplies.

Add to this the spread of nuclear weapons.

Even if nuclear weapons are never used, their very existence works like an undetected cancer in a seemingly healthy body. Cancer cells are gluttonous for space, energy, labor and nutrition. They prevent development of young healthy cells. They monopolize the work of the body. In the same way, these weapons monopolize our resources and economies and burden the nations of the world.

How much are we actually paying for our defense?

At present we plan to allocate 1.6 trillion dollars to the military. So, if you spent one million dollars every day since the birth of Christ you would not have spent HALF of what we will give the military over the next five years. Of this 1.6 trillion, 260 billion will go directly toward nuclear weapons.

We don't have to peer into a bomb crater to see the effects of the arms race. We don't even have to leave our neighborhoods. Calculate the money cut from daycare; ask a child what she ate for school lunch; ride the subways; send your child to college without a loan; or try to borrow money, find a mortgage, pay a medical bill, rent a decent apartment, apply for a job or live on social security or a pension fund. No one is immune to the effects of nuclear weapons, now or after they are used. As the military devours the budget, our health and human services continue to diminish.

This is not to say that nuclear weapons are the source of every social and economic ill, but we must question the values inherent in a military policy that is willing to risk the extinction of all life.

Where do you get all this information?

The technical information comes from a book called The Effects of Nuclear War, available from the U.S. Government Office of Technological Assessment, Washington, D.C.

What about those Americans who were not out demonstrating on the streets of New York on June 12th? What do they think?

That's a good question. According to the Harris Poll, 73% favor a proposal in which every country having nuclear weapons bans the production, storage and use of them. 90% favor a Soviet-U.S. nuclear arms control agreement.

If I want to work for nuclear disarmament, where do I go?

Individuals are organizing according to their professions, community groups, labor affiliations, religions, neighborhoods, social clubs and hobbies.

Yeah, I think I'll look into that. But between you and me, what can one person really do?

Thousands of individuals volunteer daily to work for disarmament organizations: writing, mailing, phoning, typing, researching, organizing and leading. One of the most important actions one person can undertake is to plan an informative get-together in his or her neighborhood or work-place—most disarmament groups provide speakers, films, and literature for such meetings.

One person, Randall Forsberg, proposed a way to stop the arms race; she called her plan the Freeze. She envisioned a mutually verifiable freeze between the U.S. and the U.S.S.R. on the production, deployment and testing of all nuclear weapons. Today this bilateral Freeze has had a major influence. In the 1982 election 8 out of 9 states approved the Freeze referendum, as did many major cities. In New Jersey it passed with over 75% of the vote! It won in California, Massachusetts, Montana, North Dakota, Oregon, Rhode Island, and Michigan and in Denver, Chicago, Philadelphia, Miami, and Washington D.C.

> Between you and me, what can one person really do?

The people of Garrett Park, Maryland, approved a referendum making their town the First American Nuclear-Free Zone. Sykesville, Maryland, followed. Ashland (Oregon), Cambridge (Massachusetts), Madison (Wisconsin), and the state of California have begun their own Nuclear-Free Zone campaigns.

The governments of Norway, Sweden and Denmark have declared themselves Nuclear-Free Zones, and a Nuclear-free Balkans is being discussed.

The South Pacific Islanders of Belau voted for a constitutional guarantee of becoming a

Nuclear-Free Zone leading to a Nuclear-free Pacific.

Entire continents—South America and Antarctica—are Nuclear Free Zones by international agreement.

Here in New York our City Council, like other city councils around the country, has opposed federal funding for the implementation of FEMA's civil defense plans because "such plans promote the illusion of protection and/or defense against nuclear war."

So our only defense is preventing nuclear war in the first place?

Yes. And that answers your first question. In 1982 nearly one million people came to New York for the June 12th march because they wanted to state publicly that prevention of nuclear war is our only hope. People gathered with their families, friends and colleagues from all over the U.S. and abroad to show support for a bilateral U.S.-U.S.S.R. Freeze and to oppose military spending at the expense of human needs and jobs. People from very different cultural and political backgrounds joined together for the first time in the largest rally in American history.

Somehow trying to stop nuclear war seems like an endless job!

But if we are serious about preserving life and a future and a planet for our children to inherit, then we must work for nuclear disarmament. There is an old proverb: "You may not be able to finish the task; neither are you free to excuse yourself from it."

ACT!

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800-528-6050 extension 11 toll free for the Nuclear War Prevention Manual

WRITE!

Your representative
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Washington, DC 20515

Your Senator
U.S. Senate
Washington, DC 20510

VOTE!

Register—call the League of Women Voters 212-674-8484

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